



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,453	03/07/2002	Takahiro Sasaki	566.41388X00	8788

24956 7590 01/12/2006

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.  
1800 DIAGONAL ROAD  
SUITE 370  
ALEXANDRIA, VA 22314

EXAMINER

GREY, CHRISTOPHER P

ART UNIT PAPER NUMBER

2667

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/091,453

Applicant(s)

SASAKI, TAKAHIRO

Examiner

Christopher P. Grey

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano et al. (US 5226012), hereinafter referred to as Amano, in view of Sharma et al. (US 6813275) hereinafter referred to as Sharma.

Claim 1, 3, 5, 6, 7 Amano discloses a network interface unit for receiving packet data constituting said packet data stream from said packet-switched network (element 1 in fig 1);

Amano discloses a buffer (element 3 in fig 1) for temporarily storing said packets received by said network interface unit;

Amano discloses processing unit (element 4 in fig 1) for sequentially reading and processing the packet data stored in said buffer (Col 2 lines 15-Col 3 line 4) and monitoring unit (element 6 in fig 1) monitoring state said buffer periodically (Col 2 lines 15-Col 3 line 4);

Amano discloses the processing unit suspending operation during a period of time required for reading and processing at least one packet data, in the case where the number of the packet data stored in said buffer shows a tendency decreasing from the

predetermined number data, successively the given number of times (Col 2 lines 15-Col 3 line 4).

Amano does not specifically disclose the monitoring unit making the processing unit skip at least one packet data to be read and processed next by said processing unit, in the case where a number of the packet data stored in said buffer shows a tendency of increasing from a predetermined number of data, successively a given number of times; and

Sharma discloses the monitoring unit making the processing unit skip at least one packet data to be read and processed next by said processing unit, in the case where a number of the packet data stored in said buffer shows a tendency of increasing from a predetermined number of data, successively a given number of times (Col 6 lines 6-12 and Col 5 lines 4-57). Furthermore, skipping a packet to be read and processed interpreted in its broadest term is equivalent to dropping a packet at the receiving chip (Col 1 lines 15-26), where is a packet is dropped, it is not read out, and thus skipped.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the circuit as disclosed by Sharma (Col 12 lines 20-30) with the buffer circuit as disclosed by Amano. The motivation for this combination is to compensate for overflow (Col 12 lines 20-30).

Claim 2 Amano discloses a differentiating unit for monitoring an underflow and overflow condition, where the level of a pin predetermined as the underflow and overflow flag is monitored (Col 2 lines 15-Col 3 line 4).

Amano does not specifically disclose synchronously monitoring. However, Sharma discloses synchronously monitoring (Col 5 lines 4-Col 6 line 12).

Claim 4 Amano discloses the packet data stream representing an audio signal or video signal and the buffer being read and processed sequentially in order to perform real time reproduction of these signals (Col 1 lines 9-45).

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Yazaki (US 20030012197) discloses a packet transfer apparatus having a flow detector, a controller and information table.

(b) Lin (US6754179) discloses a method for improving bandwidth utilization in a packet switched network using pause frames.

(c) Makagoshi (US 5594868) discloses a processor unit that discards a received packet when a reception buffer has insufficient space for storing the packet.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey  
Examiner  
Art Unit 2667

*C. Grey*  
1/9/03

*Chi Pham*  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
EBC CENTER  
1/9/06